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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,938	08/20/2003	Setsuo Nakamura	040302-0342	5392

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EXAMINER

LOWE, MICHAEL S

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/643,938	Applicant(s) NAKAMURA, SETSUO	
	Examiner M. Scott Lowe	Art Unit 3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/19/04</u> . | 6) <input type="checkbox"/> Other: ____ |

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Lines 3-4 are unclear in what is meant by "as". It could be interpreted by either defining "when" or "how" the limitation is done. For sake of examination it is assumed applicant meant to define "as" being "when" the limitation is done.

Claim 3 recites the limitation "the third lock mechanism" in lines 6,7,10,12. There is insufficient antecedent basis for this limitation in the claim. For sake of examination it is assumed applicant meant "the third locking mechanism".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Goellner (US 5,590,870).

Re claim 1, Goellner teaches a general purpose hand for a multiaxis manipulator for handling objects (not numbered), comprising:

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a frame member 33(or 34) to be carried by the multiaxis manipulator; and
a suction holder which comprises:
a suction pad 22 to be sucked onto the handled object;
a rod member 32 for rotatably supporting the suction pad 22,
the rod member 32 being axially movable relative to the frame member 33(or 34);
a resilient member 74,76, 56" for pressing the suction pad 22 toward the handled object;
a first locking mechanism 39 for locking axial movement of the rod member; and
a second locking mechanism 51' for locking rotation of the suction pad,
wherein the suction holder is slidably mounted on the frame member.

Claims 1-3,5 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimada (JP59097886).

Re claim 1, Shimada teaches a general purpose hand for a multiaxis manipulator R for handling objects P, comprising:
a frame member 9 to be carried by the multiaxis manipulator; and
a suction holder which comprises:
a suction pad 10 to be sucked onto the handled object;
a rod member 11 for rotatably supporting the suction pad 10,
the rod member 11 being axially movable relative to the frame member 9;
a resilient member 12 for pressing the suction pad 10 toward the handled object;
a first locking mechanism 14,3,11a (and un-numbered fasteners) for locking axial movement of the rod member; and

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a second locking mechanism 3,(and un-numbered fasteners) for locking rotation of the suction pad,

wherein the suction holder is slidably mounted on the frame member.

Re claim 2, Shimada teaches first and second suction holders (see figures) provided on the frame 9;

a first axis (not numbered) in which the first suction holder is moved to slide; and

a second axis (not numbered) in which the second suction holder is allowed to slide together with the first suction holder, wherein the first axis is controlled by an axis controller (not numbered) of the multiaxis manipulator.

Re claim 3, Shimada teaches the first and second suction holders (see figures) are linked by a third locking mechanism (the controls) for locking spacing between the first and second suction holders, and

the second suction holder is provided with a brake unit (the controls) which may be actuated as the third lock mechanism is not actuated, and may be released as the third lock mechanism is actuated, and wherein

the first and second suction holders may be slidable together with each other while the third lock mechanism is actuated, and merely the first suction holder may slidable while the third lock mechanism is not actuated.

Re claim 5, Shimada teaches a general purpose hand for a multiaxis manipulator R for handling objects P comprising:

a frame member 9 to be carried by the multiaxis manipulator; and

a holding means which comprises:

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a suction pad 10 to be sucked onto the handled object;
a rod member 11 for rotatably supporting the suction pad,
the rod member 11 being axially movable relative to the frame member 9;
a resilient member 12 for pressing the suction pad toward the handled object;
a first locking mechanism 14,3,11a (and un-numbered fasteners) for locking axial movement of the rod member; and
a second locking mechanism 3,(and un-numbered fasteners) for locking rotation of the suction pad, wherein the holding means is slidably mounted on the frame member.

Claims 1-3,5 are rejected under 35 U.S.C. 102(b) as being anticipated by Neveu (US 6,863,323).

Re claim 1, Neveu teaches a general purpose hand for a multiaxis manipulator for handling objects, comprising:

a frame member 1 to be carried by the multiaxis manipulator; and
a suction holder (5,8,9) which comprises:
a suction pad 6 to be sucked onto the handled object;
a rod member 7 for rotatably supporting the suction pad 6,
the rod member 7 being axially movable relative to the frame member 9;
a resilient member 4b for pressing the suction pad 6 toward the handled object;
a first locking mechanism (8,4b)for locking axial movement of the rod member; and
a second locking mechanism (controls, 5b,3,etc.) for locking rotation of the suction pad,
wherein the suction holder is slidably mounted on the frame member.

Re claim 2, Neveu teaches first and second suction holders (5,8,9) provided on the frame 1;

a first axis (not numbered) in which the first suction holder is moved to slide; and
a second axis (not numbered) in which the second suction holder is allowed to slide together with the first suction holder, wherein the first axis is controlled by an axis controller (not numbered) of the multiaxis manipulator.

Re claim 3, Neveu teaches the first and second suction holders (5,8,9) are linked by a third locking mechanism (the controls,8,4b,5b,3,etc.) for locking spacing between the first and second suction holders, and
the second suction holder is provided with a brake unit (the controls,8,4b,5b,3,etc.) which may be actuated as the third lock mechanism is not actuated, and may be released as the third lock mechanism is actuated, and wherein
the first and second suction holders may be slidable together with each other while the third lock mechanism is actuated, and merely the first suction holder may slidable while the third lock mechanism is not actuated.

Re claim 5, Neveu teaches a general purpose hand (not numbered) for a multiaxis manipulator (not numbered) for handling objects comprising:
a frame member 1 to be carried by the multiaxis manipulator; and
a holding means (5,8,9) which comprises:
a suction pad 6 to be sucked onto the handled object;
a rod member 7 for rotatably supporting the suction pad,
the rod member.7 being axially movable (8,4b) relative to the frame member 1;

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a resilient member 4b for pressing the suction pad toward the handled object;
a first locking mechanism (8,4b) for locking axial movement of the rod member; and
a second locking mechanism (controls, 5b,3,etc.) for locking rotation of the suction pad,
wherein the holding means is slidably mounted on the frame member.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neveu (US 6,863,323) in view of Uemara (US 5,005,277).

Re claim 4, Neveu teaches a general purpose hand (not numbered) for (intended use, see abstract) a multiaxis manipulator (not numbered) which may handle a body side outer including a rear fender, the body side outer being provided with a door opening, the hand comprising:

a frame member 1 to be carried by the multiaxis manipulator;
and a suction holder (5,9,8) for holding the rear fender of the body side outer,
the suction holder comprising:
a suction pad 6 to be sucked onto an inner surface of the rear fender;
a rod member 7 for rotatably supporting the suction pad,

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the rod member being axially movable (8,4b) relative to the frame member;
a resilient member 4b for pressing the suction pad toward the body side outer;
a first locking mechanism (8,4b) for locking axial movement of the rod member; and
a second locking mechanism (controls, 5b,3,etc.) for locking rotation of the suction pad,
wherein the suction holder is slidably mounted on the frame member.

Neveau does not teach a gauge clamp for gripping a flange provided around the door opening of the body side outer. However, Uemara teaches a gauge clamp 17,18 for gripping a flange provided around the door opening of the body side outer in order to lock the gripper into a desired vehicle body section (column 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified to have modified Neveau by Uemara to have a gauge clamp for gripping a flange provided around the door opening of the body side outer in order to lock the gripper into a desired vehicle body section.

Claim 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goellner (US 5,590,870) in view of Uemara (US 5,005,277).

Re claim 4, Goellner teaches a general purpose hand (not numbered) for (intended use) a multiaxis manipulator (not numbered) which may handle a body side outer including a rear fender, the body side outer being provided with a door opening, the hand comprising:
a frame member 33(or 34) to be carried by the multiaxis manipulator;
and a suction holder for holding the rear fender of the body side outer,

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the suction holder comprising:

a suction pad 22 to be sucked onto an inner surface of the rear fender;

a rod member 32 for rotatably supporting the suction pad,

the rod member being axially movable relative to the frame member;

a resilient member 74, 76, 56", for pressing the suction pad toward the body side outer;

a first locking mechanism 39 for locking axial movement of the rod member; and

a second locking mechanism 51' for locking rotation of the suction pad,

wherein the suction holder is slidably mounted on the frame member.

Goellner does not teach a gauge clamp for gripping a flange provided around the door opening of the body side outer. However, Uemara teaches a gauge clamp 17, 18 for gripping a flange provided around the door opening of the body side outer in order to lock the gripper into a desired vehicle body section (column 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified to have modified Goellner by Uemara to have a gauge clamp for gripping a flange provided around the door opening of the body side outer in order to lock the gripper into a desired vehicle body section.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sawdon (US 6,722,842) teaches clamps and suction holders with a body side outer.

Kubo (US 5,123,161) teaches clamps and suction holders with a body side outer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Scott Lowe whose telephone number is (571) 272-6929. The examiner can normally be reached on 6:30am-4:30pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on (571) 272-6607. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

msl



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